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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/792,178	03/03/2004	David E. Francischelli	P-8575.06	4900

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MEDTRONIC, INC.
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EXAMINER

VRETTAKOS, PETER J

ART UNIT	PAPER NUMBER
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3739

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/792,178	FRANCISCHELLI ET AL.	
	Examiner	Art Unit	
	Peter J. Vrettakos	3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-33 and 62-79 is/are pending in the application.
- 4a) Of the above claim(s) 62-79 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The action is final. Arguments presented 8-25-06 are addressed below.

Claims were amended with electrode language. New art is presented showing that the amendment was obvious (laser makes obvious electrodes/radio frequency energy).

The application is published application number: 2004/018 6465. The publication is classified in US 606/34.

The Office acknowledges the Applicant's right to recapture certain non-elected claims.

The claims are most consistent with the embodiment in figure 7.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 25-30 and 33 rejected under 35 U.S.C. 103(a) as being unpatentable over Altshuler et al. (6,015,404) in view of Edwards (6,692,490).

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Altshuler is silent regarding electrodes.

Edwards discloses in an analogous electrosurgical device that laser (Altshuler) and radiofrequency energy (electrodes as now claimed by the Applicant) are interchangeable and thus one is obvious in light of the other (at the time of the Applicant's invention). See last sentence in the Edwards abstract. The motivation to use electrodes in the Althsuler device would be to provide an additional energy modality (RF) to the device.

Note: specific references in the patented disclosure below are not limiting to those excerpts. (The Office reserves the right in future actions to apply other excerpts, need be, from the patent.)

25. A method of ablating organic tissue, comprising: positioning a conductive element (16) adjacent the organic tissue; supplying power to the conductive element; sensing with a sensor (30) positioned adjacent the conductive element the vibration (col. 4:51-58) of the organic tissue; and reducing power to the conductive element when the vibration reaches a given value (42; col. 5:15-20).

26. The method of claim 25, further comprising: halting the power when the vibration reaches a given value (col. 5:15-20).

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27. The method of claim 25, further comprising: supplying fluid from a fluid supply to the tissue; and halting the fluid supply when the vibration reaches a given value. See col. 6:6-12.

28. The method of claim 25 further comprising: sending a signal (36, col. 5:2-4; col. 5:26-27) from the sensor (30) to a switch (42) to reduce the power (col. 5:26-29).

29. The method of claim 25, further comprising: providing output (col. 5:15-17; col. 15:43-49) from an output device (46) when the vibration reaches a given value.

30. The method of claim 29 further comprising: sending a signal (36 or 88 in col. 7:17-18) from the sensor (30) to the output device (46); and sending an indicator signal from the output device.

33. The method of claim 25 wherein the sensor (30) is integrated (through 18) with the conductive element (16). See figure 1.

Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Altshuler in view of Vesely et al. (6,246,898).

No piezoelectric sensors are expressly taught in Altshuler. (Although acoustic sensors are very often piezoelectric.)

However, in an analogous ablation (light and RF energy examples in col. 29:32-34 and claim 5, respectively) method, Vesely discloses piezoelectric sensors made of crystal (col. 1:49-50) or polymer (col. 21:31-34).

The combination of the two patents suggests acoustic feedback control of ablation using piezoelectric sensors. The motivation to combine the patents is fivefold (five reasons to use the sensing system of Vesely) and discussed in Vesely col. 1:61 through col. 2:42.

Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to modify Altshuler in view of Vesely et al. by using the piezoelectric sensing means in Vesely in the Altshuler device and method. Again, the motivation to combine the patents is fivefold and discussed in Vesely col. 1:61 through col. 2:42.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Jahns et al. (6,887,238 ; 6,558,382), Cates et al.

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(5,194,723) – ablation feedback control with a piezoelectric sensor of non-organic tissue.

Response to Arguments

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection. New art is presented to argue that Altshuler's laser disclosure makes obvious electrode disclosure. Edwards 6,692,490 in the last sentence of the Abstract discloses laser (as in Althsuler above) and radiofrequency energy (through electrodes as in the Applicant's claims) interchangeably.

Applicant's arguments toward Vesely concern Vesely's intended use, however the rejection above only relies on Vesely for its structure (piezoelectric structures). To this end, the arguments are not persuasive.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory

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action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J. Vrettakos whose telephone number is 571-272-4775. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C. Dvorak can be reached on 571-272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pete Vrettakos
January 16, 2007




ROY D. GIBSON
PRIMARY EXAMINER